

Remarks/Arguments

Claims 1 - 10 remain in the application for consideration. Claims 11 - 15 have been withdrawn from consideration pursuant to a requirement for restriction and have been canceled without prejudice by this Amendment.

1. Restriction has been required between the following inventions:

I. Claims 1 - 10 drawn to a method of imaging a digital display and classified in class 347, subclass 256; and

II. Claims 11 - 15 drawn to a device for transposing a lens classified in class 359, subclass 696.

In support of the requirement, it is asserted that these groups of claims are related as combination and subcombination wherein the combination as claimed does not require the particulars of the subcombination for patentability and the subcombination has utility by itself or in other combinations.

Applicants hereby affirm the provisional election of the claims of Group I (1 - 10) for examination in the present application without prejudice to their right to

Appln. No. 09/748,650  
Amendment dated February 11, 2005  
Reply to Office Action of November 15, 2004

file a divisional application directed to the non-elected claims of Group II.

Non-elected claims 11 - 15 have been canceled without prejudice.

2. The Abstract of the Disclosure has been objected to for being too lengthy and for containing improper phraseology.

It is believed that the amended Abstract overcomes this objection. The amended Abstract is within the guidelines for the number of words, i.e., not in excess of 150, and does not include the terms "comprised" and "means".

Reconsideration of the objection and withdrawal thereof are respectfully requested.

3. Claims 9 and 10 have been rejected under the second paragraph of 35 USC § 112 as being indefinite.

It is believed that this rejection has been overcome by the amendment made in claim 9, which has been amended in accordance with the suggestion made by the examiner. Claims 9 and 10 now comply with the requirements of 35 USC § 112.

Reconsideration of this ground of rejection and withdrawal thereof are respectfully requested.

4. Claims 1 - 3 and 5 - 10 have been rejected under 35 USC § 103(a) as being unpatentable over U.S. 5,689,283 ("Shirochi") in view of U.S. 6,113,240 ("Iizuka"). In support of the rejection the examiner has asserted, generally, that Shirochi teaches a method of imaging a display having the elements recited in present claims 1 - 3 and 5 - 10 except for the provision of a plurality of lenses where the transposable lens has a different diopter power compared to that of the remaining lenses. It is further asserted that Iizuka teaches a digital display system which includes a first and a second lenses which have different focal lengths. The examiner has concluded that it would have been obvious to one of ordinary skill in the art to incorporate a plurality of lenses in the device of Shirochi as taught by Iizuka.

Applicants traverse this ground of rejection. The references, viewed individually or in combination, do not teach or suggest the subject matter of claims 1 - 3 and 5 - 10 within the meaning of 35 USC § 103. Present claims 1 - 3 and 5 - 10 are drawn to a method of imaging a digital display onto an image plane and a printer for doing so. The method of the present invention increases the color saturation of a digital printer which utilizes an LCD display.

Inexpensive compact digital displays are known for use in viewfinders for electronic devices such as camcorders and digital cameras. Such displays typically include a color filter array as do typical larger color displays such as CRT and LCD television sets and monitors. At normal viewing distances it is difficult for the viewer to see the color array. When printing on photosensitive film the array pattern can be reproduced on the film.

According to the invention of applicants, a lens is jogged, or transposed, out of the optic axis and the image on the LCD array is moved slightly, e.g., by one or two pixels, thus overlaying the three monochromatic (red, green and blue) images thereby increasing the color saturation of the printed image.

The references relied upon to support the rejection of claims 1 - 3 and 5 - 10 do not teach or suggest applicants' method and printer within the meaning of 35 USC § 103. Shirochi describes a method to increase the resolution of an image display through the incorporation of an optical path changer. The examiner has described the method of Shirochi as:

"wherein the resolution of an image on the display system (display monitor 224) or on a hard copy of a printer (225) is increased by shifting vertically a lens (31) out

of the optical axis (Fig. 11), the printer including a digital display (LCD panel 10), a lens (31), and an image plane...".

Shirochi describes the shifting lens element in both image capture (Fig. 28) and in image display (Fig. 5). The display (224) and printer (225) are illustrated in Fig. 28 and described in column 17 beginning at line 53. There is described a video capture device with a light path changer delivering a restored signal to a conventional video display or video printer. The printer 225 is a conventional video printer. The printer 225 may be supplied with the digital color video signal directly. (Column 18 line 59) Shirochi does not describe a method for printing using such a shifting lens.

The secondary reference, Iizuka, does not render the rejection any more effective. Iizuka describes a video projector where the entire image can be moved a substantial amount to center the image onto a projection screen. The movements are of the entire image, perhaps by half the image width or height. As pointed out above, applicants' claimed method and printer increase the color saturation of the image using the same digital area display by displacing the image formed by the display on the film image plane by a small amount.

Thus, Iizuka, viewed in combination with Shirochi does not teach or suggest applicants' advantageous method and printer. In order to properly support a rejection

Appln. No. 09/748,650  
Amendment dated February 11, 2005  
Reply to Office Action of November 15, 2004

under 35 USC § 103 a reference, or combination of references, must teach or suggest the claimed subject matter so as to place it in the possession of the general public. Here, as pointed out in detail above, applicants' claimed printer would not be obvious to those skilled in the art from the disclosures of the references.

Reconsideration of this ground of rejection and withdrawal thereof are respectfully requested.


5. Claim 4 has been objected to as being dependent upon a rejected base claim and indicated as containing allowable subject matter. Claim 4 is dependent upon claim 3 which is in turn dependent upon claim 1. Claims 1 and 3 have been shown to be patentably distinct over the references of record. Accordingly, claim 4 is believed to be allowable in its present form.

In summary, claims 1 - 10 have been shown to be proper in form for allowance and in substance to be directed to subject matter which is novel and patentably distinct over the prior art references of record.

Appln. No. 09/748,650  
Amendment dated February 11, 2005  
Reply to Office Action of November 15, 2004

Reconsideration of the application and allowance of  
claims 1 - 10 are respectfully requested.

Respectfully submitted,


  
Gaetano D. Maccarone  
Registration No. 25,173

Polaroid Corporation  
Patent Department  
1265 Main Street  
Waltham, MA 02451  
Tel.: 781-386-6405  
Fax: 781-386-6435

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: February 11, 2005

  
Gaetano D. Maccarone  
Registration No. 25,173